

JAGUAR · POWERTRAIN

P1243

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1243 · Jaguar

Analog Ground

P1243 on a Jaguar indicates that the engine control module (ECM) has detected an out-of-range voltage on its analog ground circuit, which is the reference ground used by various sensors and actuators. This ground provides a stable 0-volt reference for signals such as throttle position, manifold absolute pressure, and fuel tank pressure, so a fault here can skew multiple sensor readings and trigger drivability issues.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Jaguar specific	Medium	Intermediate	Fuel and air metering (injector circuits)

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or intermittent misfire due to corrupted sensor signals
- Hesitation or stumble during acceleration
- Poor fuel economy or rich/lean fuel mixture codes
- Erratic gauge readings or dashboard warnings
- In severe cases, the engine may enter limp mode or stall

Common causes, most likely first

- 1 Corroded, loose, or damaged ground wire between the ECM and chassis/engine block
- 2 Faulty ECM ground terminal or internal ECM ground circuit failure
- 3 Water intrusion or oil contamination in the engine wiring harness affecting ground integrity
- 4 Damaged or chafed wiring in the analog ground circuit, often near sharp edges or heat sources
- 5 Poor chassis ground connection at the battery or engine block
- 6 Aftermarket accessories improperly grounded, introducing ground loops or voltage offsets



How to diagnose and fix it

- 1 Inspect and clean the battery negative terminal and engine block ground straps, tightening to specification
- 2 Locate the ECM ground points and check for corrosion, looseness, or damage; clean and retorqued as needed
- 3 Perform a voltage drop test on the analog ground circuit from the ECM connector to the chassis while loading the circuit
- 4 Visually inspect the wiring harness for chafing, pinches, or contamination, especially around the ECM and engine sensors
- 5 Disconnect the ECM and check for bent or recessed pins in the ground circuit terminals
- 6 If the ground circuit tests good, substitute a known-good ECM to rule out internal ground failure
- 7 After repair, clear the code and verify that the analog ground voltage remains stable under various operating conditions

Analog ground faults often masquerade as sensor failures

- A skewed analog ground can cause multiple sensor codes to set simultaneously, leading technicians to replace good sensors unnecessarily.
- The analog ground is separate from the digital ground in many Jaguar ECMs, so a fault may not affect all sensors equally and can be intermittent.
- Water ingress into the ECM connector or harness is a common cause on Jaguar models, especially after windshield replacement or cowl work.
- Voltage drop testing under load is more reliable than static resistance checks, as a ground can test fine with no current flowing.
- Aftermarket audio or alarm installations frequently tap into ground points and can introduce offsets that trigger P1243.

Can I keep driving with P1243?

If the only symptom is the check engine light and the car runs normally, you can drive cautiously to a repair shop, but avoid heavy acceleration or towing. If drivability issues such as rough running or stalling occur, stop driving and have the vehicle towed to prevent damage or unsafe conditions.

Tools that help

- Digital multimeter with voltage drop capability
- Wiring diagram for the specific Jaguar model
- Socket set and terminal cleaning brush
- Scan tool capable of reading Jaguar-specific codes and live data
- Electrical contact cleaner and dielectric grease



Reading P1243

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Jaguar): its meaning depends on the make.
- 2** Fuel and air metering (injector circuits).
- 43** The exact fault within that area.

Often seen with

P1242 Cylinder 6 Injector Circuit Open Circuit · **P1242** Throttle Vent Control Motor Circuit 2 Malfunction · **P1242** Sensor Power Supply High Input · **P1242** Throttle Vent Control Motor Circuit 2 Malfunction · **P0106** MAP/Barometric Pressure Circuit Range/Performance · **P0121** Throttle Position Sensor A Circuit Range/Performance · **P0453** Evaporative Emission System Pressure Sensor/Switch High · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation

See it working

Watch the animated explainer [How a Coolant Temperature Sensor Works](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/jaguar-p1243/>

